

EAGLE'S PROPWASH



June 2013 Issue
CHAPTER 113
"The Backyard Eagles"



This is what Young Eagles is all about!
photo courtesy Shunsuke Shibata

Our Web Site: www.113.eaachapter.org EAA113@yahoogroups.com

Meetings: 7:30 PM the 3rd Thursday of each month at the

EAA 113 AVIATION EDUCATION CENTER

Member Services

Class I Board of Directors:

President: John Maxfield (248) 890-6767

Vice President: Shahar Golan (248) 767-6630

Secretary: Debbie Forsman (734) 397-3452

Treasurer: Grant Cook (734) 223-2688

Class II Board Members:

Al Bosonetto (734) 261-5518

Bill Brown (734) 420-2733

Dave Buck (734) 453-5375

Lou Lambert (734) 207-7986

Mike Scovel (734) 462-1176

Library: Barb Cook (734) 277-3469

Newsletter: Elizabeth Hebron (734) 776-9294
liz.hebron@gmail.com

Class III Board Member:

Tom Smith (734) 459-9654

Membership Committee:

Roster: Mark Freeland (248) 212-9666

Dues: Grant Cook (734) 223-2688

Technical Counselors:

Randy Hebron (734) 326-7659

Dan Valle (313) 539-9818

Flight Advisors:

John Maxfield (248) 890-6767

Dan Valle (313) 539-9818

Scholarships: Jim Trick (517) 546-3944

Elizabeth Hebron (734) 776-9294

Young Eagles/Eagle Flights:

Debbie Forsman (734) 397-3452

Dave James (734) 721-4213

Refreshments: Joe Griffin (734) 455-3107

Webmaster: John Maxfield

webmaster@eaa113.org

Aviation Center Management Committee:

Al Bosonetto (734) 261-5518

Dave Buck (734) 453-5375

Bill Brown (734) 420-2733

Bob Skingley (734) 522-1456

Chapter Mission Statement

"EAA Chapter 113's major focus is on the relationships with people who have diverse aviation interests, centered around their love of flight, fellowship, learning, and fun. Chapter members have a passion for flying and are willing to share it with others. Chapter 113 provides the opportunity for exchange of information, as well as the interaction that leads to friendships that last a lifetime."

Board

"The Board of Directors are to provide both advice and assistance to the chapter officers on an ongoing basis."



PRESIDENT'S PODIUM

John Maxfield (248) 890-6767

avee8rrr@yahoo.com

June 2013

Father's Day is upon us and here at EAA Chapter 113, that means it's time for our Pancake Breakfast Fly-In. June 16th is the date, we start serving at 7am so be sure and get there plenty early. We'll be setting up the equipment on Saturday the 15th right after breakfast. EAA is an organization run by volunteers at all levels. We're very fortunate to have so many talented individuals within our Chapter. I know we can count on you to lend a hand. Let us know if there's a particular job you're interested in helping with, there's plenty to go around.

Karen Morency has outdone herself marketing our Fly-In Breakfast this year. She was able to have our advertising flyer included in each of the 1000 packages that are given to the participants of the Plymouth Father's Day 5k run. Just think of the potential number of people we could be serving this year! Our Fly-In poster is available in the files section of the Yahoo newsgroup for you to print and post in your neighborhood. Let's make this a banner year, remember, proceeds from this annual event fund our scholarship program.

May 18th was Learn to Fly Day and the weather provided a great opportunity for me to give an Eagle Flight to Paul Murphy. Paul is a local insurance agent that has helped your board of directors negotiate the requirements necessary for us to hold various functions at the airport. Be sure to read about Paul's experience elsewhere in this newsletter. Registration forms for EAA's Eagle Flight can be found in our meeting room or online at EAA.org. Help get an adult interested in flying through Eagle Flights.

I'm happy to report on a new fly-in destination in our area. Tecumseh Products Airport has been purchased by Dan Mills, an airline pilot that was looking for a home for his Cessna 172, Stearman, and AT-6. Tecumseh Products has been renamed Tecumseh Mills which hosted a BBQ Fly-In on May 23rd. About three dozen airplanes gathered on one of the nicest days you could ask for. There was plenty of food and a great band provided a variety of music for dancing. I was thrilled to land there for the first time ever that day as it had previously been a private airport and closed to the public.

Our June meeting will start at 6:30 pm with a cookout of our own. Chapter 113 will provide hamburgers, hot dogs, drinks, and condiments. Please bring a dish to add to the table. We'll be hosting Bill Miller, our 2013 scholarship winner, and his family for dinner. Shachar Golan will also share his recent trip to Israel including his flight review in a Cessna 172. Roi Golan has started his flight training in a sailplane here in Michigan. Perhaps we'll get to see a little bit of that exciting day too. If time permits, we can have a look at part of the June Chapter video presentation from EAA Oshkosh. Stay up to date with EAA 113 at www.113.eaachapter.org

See You June 15th for set up and June 16th for our Pancake Breakfast Fly-In

Happy Landings

John Maxfield



PAULSON AVIATION & HISTORY *LIBRARY*

Barb Cook (734) 277-3469

barb@armipay.com

June 2013

So where are the aerodynamics books?" you ask. Well, Sanjay, there are two places for these. We now have several design books on the 629.132 3 shelf:

Laminar Flow Theory

All About Stalls & Spins

Aerodynamics, the Illustrated Guide

Anatomy of a Spin

Fundamentals of Transonic Flow

Wings: Insects, Birds, Men

There are also design books on the Homebuilders shelf area, which has more divisions now:

629.134 *Aircraft Construction*

629.134 1 *Design of Homebuilts*

629.134 2 *Wood Construction*

629.134 31 *Composite Construction*

629.134 34 *Fabric Covering*

629.134 352 *Engines*

629.134 *Sheet Metal & Welding*

629.134 7 *Propellers*

629.134 9 *Jet Aircraft*

Another interesting item is "*LOGBOOK; a Pilot's Life*" an autobiography by Crocker Snow on the 629.130 92 SNOW shelf. "From the biplane era through WWII and into the jet age, Crocker snow has lived the history of Aviation. During the 20s and 30s he developed commercial aviation in New England, then commanded a B-17 heavy ombardment group [in WWII]...and was named Pioneer of the U.S. Air Force in 1997." (Donated by Don Ruff)

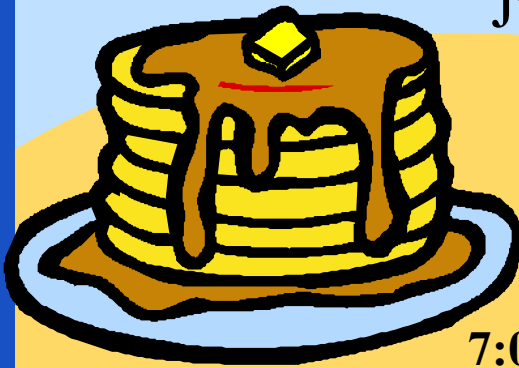


EAA Chapter 113's Annual



Father's Day Pancake Breakfast

June 16th, 2013



Mettetal Airport (1D2)
EAA 113 Aviation Center
Canton, MI

7:00 a.m. - 11:00 a.m.

Fly in or Drive in . . .

... for breakfast, helicopter rides and static displays!

(Proceeds help fund the EAA 113 Aviation Scholarship Program)

For more information visit our website: www.113.eaachapter.org

“FLY ONE” 2013

By: John Maxfield

International Learn to Fly Day was May 18th, 2013 and I wanted to participate in EAA’s Eagle Flight program with this year’s slogan to “Fly One”.

Our Secretary, Debbie Forsman, had been in contact with Paul Murphy, a local insurance agent over the past couple of years on Chapter business and had related that he understood aviation, having had some pilot training prior to getting married. That was just the kind of person Eagle Flights were designed for, so we contacted Paul, explained the program, and invited him to go for a flight. As it turns out, Paul had stopped his flight training just short of his check ride and was still very much interested and was available to meet us on the designated day.

That Saturday dawned bright and clear, almost perfect for the mission at hand. After a tour of our EAA Chapter facilities, we completed the Eagle Flight paperwork and proceeded to my hangar. Paul was clearly interested as we performed the preflight inspection on my 1948 Funk Aircraft. After a couple of pictures and a call to Paul’s wife to watch for us, we climbed aboard.

Paul kept right up with the action of engine start, taxi, and pre-takeoff procedures. He even recalled the acronym he’d learned for the engine run-up from back in the day and how it was very close to the one I use.



I encouraged Paul to follow along on the controls for the take off and enthusiastically took control when I offered it on climb out. We proceeded to Paul's neighborhood so he could see the area from the air, then circled once around the dance studio where his family was now watching for us. You know, it's hard to tell from the air sometimes just which wave you're getting from the ground! Kidding aside, Paul's wife is very supportive and I expect we'll see the whole family back at the airport for a future EAA Chapter activity.

We proceeded out to the practice area where I think the aviation bug really bit Paul. His previous training was evident as he maneuvered the airplane about the sky recalling skills from old lessons learned. I was impressed that he remembered to check for traffic before making a turn.

All too soon, we were back in the traffic pattern where Paul again followed along on the controls through the landing and taxi in. I think the after flight smile in the pictures tell the rest of the story. I'm looking forward to Paul's eventual return to the sky, satisfied in knowing we had a hand in it with EAA's Eagle Flight Program and "Fly One"!



ASSEMBLING THE MIGHTY EIGHTH

Leslie A. Lennox Lt./Col. USAF(ret)

Of all the stories that have been written, and movies that have been shown, about the 8th Air Force, very little attention has been given to what was involved in assembling 1200 B-17's and B-24's each day, to get them in formation to carry out a strike against Germany.

Certainly showing bombers under attack by fighters, or encountering heavy flak, was a reality, and are interesting to watch. Also, stories about some of the rougher missions make interesting reading. But what was going on over England, each morning, could get just as scary to the crews as the time spent over some of the targets. The planning, and coordination, that had to be accomplished during the night, by the operations planners of each Group, so that the crews could be briefed, was unbelievable.

If the planners had failed to do their jobs properly, there would have been a free for all among Bomb Groups, in the skies over England. The rendezvous points, altitude, and times had to be precise, and known by all of the crews, before the Eighth Air Force could get in formation. The success of the planners, in accomplishing their mission, enabled the Eighth Air Force to become the most powerful air armada ever assembled. In my view, how this was accomplished is one of the major untold stories of the war.

I was a pilot in the 95th Bomb Group, in late 1944 and early 1945, and what follows is a typical mission, as I remember it, from a crew member's perspective.

Early in the evening, our Squadron Operations would post the names of the crews that were scheduled to fly the following day. There were two ways we could be notified if the Group had been alerted to fly. One was by means of lights on the front of the orderly room, and the other with raising of colored flags. If a green light was on, the Group was alerted, if a red light was on we would fly, and if a white light was on, the Group would stand down. The light was monitored frequently throughout the evening to learn our status and, normally, we would know before going to bed if we would be flying the next day.

On the morning of a mission, the CQ (charge of quarters) would awaken the crews about four or five o'clock, depending on takeoff time. The questions we always asked were, "What is the fuel load?" and, "What is the bomb load?" If his answer was, "full Tokyo tanks," we knew we would be going deep into Germany.

Shortly after being awakened, "6-by" trucks would start shuttling us to the mess hall. We always had all the fresh eggs we could eat, when flying a mission. After breakfast, the trucks carried us to the briefing room. All of the crew members attended the main briefing, and then the Navigators, Bombardiers and Radio operators went to a specialized briefing. At the main briefing, in addition to the target information--anti-aircraft guns, fighter escort and route in--we received a sheet showing our location in the formation, the call signs for the day and all the information we would need to assemble our Group and get into the bomber stream.

After briefing, we got into our flight gear, drew our parachutes and loaded onto the trucks for a ride to our plane. We were now guided by the time on our daily briefing sheet. We started engines at a given time and watched for the airplane we would be flying in formation with to taxi past, then we would taxi behind him. We were following strict radio silence.

We were now parked, nose to tail around the perimeter, on both sides of the active runway, and extremely vulnerable to a fighter strafing attack. At the designated takeoff time, a green flare would be fired and takeoff would begin. Every thirty seconds an airplane started takeoff roll. We were lined up on the perimeter so that the 12 airplanes of the high squadron would take off first, followed by the lead and then the low squadron.

Each Group had a pattern for the airplanes to fly during climb to assembly altitude. Some would fly a triangle, some a rectangle and our Group flew a circle, using a "Buncher" (a low frequency radio station) which was located on our station. The patterns for each Group fit together like a jig saw puzzle. Unfortunately, strong winds aloft would destroy the integrity of the patterns, and there would be considerable over running of each other's patterns.

Many of our takeoffs were made before daylight, during the winter of '44 and '45, when I was there, so it was not uncommon to climb through several thousand feet of cloud overcast. Also it was not uncommon to experience one or two near misses while climbing through the clouds, although you would never see the other airplane. You knew you had just had a near miss, when suddenly the airplane would shake violently as it hit the prop wash of another plane. It was a wonderful feeling to break out on top, so you could watch for other planes, to keep from running into each other. To add to the congestion we were creating, the Royal Air Force Lancasters, Halifaxes, and Wimpys would be returning from their night missions, and flying through our formations. Needless to say, pilots had to keep their heads on a swivel and their eyes out of the cockpit.

After take off, the squadron lead would fire a flare every 30 seconds, so that we could keep him located and enable us to get into formation quicker. The color of our Group flare was red-green. The first thing you would see, when breaking out of the clouds, was a sky filled with pyrotechnics, so you had to search the sky for the Group flare, which would identify the lead airplane of your Squadron. Once you had it located, you could adjust your pattern to climb more quickly into formation with him. As each airplane pulled into formation, they would also fire a flare, with the lead plane, making it much easier for the following aircraft to keep him in sight. I think most crew members would probably agree that the pyrotechnic show, in the skies over England, in the morning when the Eighth was assembling, was a rare sight to behold.

The order of progression for assembling the Eighth Air Force was to first assemble the Flight elements, the Squadrons, the Groups, the Combat wings, the Divisions and, finally, the Air Force.

As soon as the four Squadron elements were formed, the high, low and second elements would take up their positions on the lead element, to form a Squadron. When the three Squadrons had completed assembly, it was necessary to get into Group formation. This

was accomplished by having the three Squadrons arrive over a pre-selected fix at a precise time and heading. The high and low Squadrons were separated from the lead Squadron by 1000 feet and, after getting into Group formation, they would maintain their positions by following the lead Squadron.

Then it was necessary to get into the Combat Wing formation. We were in the 13th Combat Wing, which consisted of three Bomb Groups: the 95th, the 100th and the 390th. Whichever Group was leading the Wing that day, would arrive over a pre-selected point, at a precise time and heading. Thirty seconds later, the second Group would pass that fix, followed by the third Group, thirty seconds later. We were then in Combat Wing formation. The navigators in the lead airplanes had a tremendous responsibility, to ensure that the rendezvous times were strictly adhered to.

There were three Divisions in the Eighth, the 1st, 2nd and 3rd. The 1st and 3rd Divisions consisted of B-17s only, and the 2nd Division was B-24s. The B-24s were faster than the B-17s, but the B-17s could fly higher, therefore, the two were not compatible in formation. As a result the 1st and 3rd Divisions would fly together and the 2nd Division would fly separately.

Now that the Groups were flying in Combat Wing formation, it was necessary to assemble the Divisions. This was usually accomplished at the "coast out"--a city on the coast, selected as the departure point "fix." The Group leader in each Combat Wing knew his assigned position in the Division, and the precise time that he should arrive at the coast out departure point, to assume that position in the Division formation. The lead Group in the Division, which had been selected to lead the Eighth on the mission, would be first over the departure fix. Thirty seconds after the last Group in the first Wing passed that point, the second Wing would fall in trail, and so on, until all Combat Wings were flying in trail and the Division would be formed. One minute later, the lead Group in the other Division would fly over that point, and the Combat Wings in that Division would follow the same procedure to get into formation. When all of its Combat Wings were in trail, the Eighth Air Force B-17 strike force was formed and on its way to the target. At the same time the 2nd Division B-24s were assembling in a similar manner and also departing to their target.

Meanwhile, as the bombers were assembling for their mission, pilots from the Fighter Groups were being briefed on their day's mission. Normally, 600 to 800 P-38's, P-47's, and P-51's would accompany the bombers to provide protection against enemy fighter attacks. Fighter cover was not needed by the bombers until they were penetrating enemy territory, therefore to help conserve fuel. fighter takeoffs were planned to give them enough time to quickly assemble after takeoff, and climb on course up the bomber stream to the groups they would be covering. The combined strength of the fighters and bombers brought the total number of aircraft participating in a mission to approximately two thousand.

A major problem that presented itself, on each mission, was that the bomber stream was getting too stretched out. It was not uncommon for the headlines in stateside newspapers--in trying to show the strength of our Air Force--to state that the first Group of bombers was bombing Berlin, while the last Group was still over the English Channel. It

made great headlines but was a very undesirable situation. It meant that the Groups were out of position, and not keeping the proper separation. Furthermore, it was almost impossible for them to catch up and get back into the desired formation. This made the entire bomber stream more vulnerable to fighter attacks.

Finally, our planners figured out what we were doing wrong. When the first Group departed the coast out fix, it started its climb to what would be the bombing altitude. Then, as each succeeding Group departed that fix, it, too, would start climbing. The problem with this procedure was that, as soon as the first Group started its climb, its true airspeed would start to increase, and it would encounter different wind velocities. Now it would start to pull away from the Group in back of it, and the "stretchout" of the bomber stream would begin. By the time the last Group had reached the coast out, to start its climb, the first Group would be leveled off, with a true airspeed approaching 250 miles per hour, and the bomber stream would be really stretching out.

The solution to this problem that had been frustrating the Bomber crews for so long was pretty simple. We would no longer start climbing at the coast out, but instead, at a designated time, all Groups would start climbing, irrespective of position. This meant that we all would have similar true airspeeds and would be influenced by the same winds aloft. That took care of the problem. It was still possible for a Group to be out of position, because of poor timing, but the entire bomber stream wouldn't get all stretched out.

When you consider the way our Air Traffic Control system operates today, and all the facilities at their disposal to guide each individual airplane through the sky to ensure its safety, it's almost unbelievable that we were able to do what we did. To think of launching hundreds of airplanes, in a small airspace, many times in total darkness, loaded with bombs, with complete radio silence, and no control from the ground, and do it successfully day after day, with young air crews, with minimum experience, is absolutely mind boggling.

The accomplishments of the Eighth Air Force have been and will be reviewed by historians from World War II on. There never will be another air armada to compare to it. I feel confident that they will never cease to be amazed by our ability to assemble hundreds of heavy Bombers, under the conditions we were confronting, into the devastating strike force we now fondly refer to as, "The Mighty Eighth."



(Article submitted by
Bruce Breisch via Dave
Buck.)

EAA CHAPTER 113 YOUNG EAGLES - MAY 4, 2013



Dave James and Young Eagles
Photos courtesy of Shunsuke Shibata



DAWN PATROL

Pancake Breakfast

SUNDAY JUNE 9, 2013

AT MASON JEWETT AIRPORT (TEW)

Eden Road @ Kipp Road, Mason, MI ~ south of the Ingham County Fairgrounds

7:00 AM TO 11:00 AM

BREAKFAST \$ 6.00 PER PERSON

(CHILDREN 12 & UNDER \$3.00)

Come enjoy an All-You-Can-Eat Pancake Breakfast
served with eggs, sausage, juice & coffee

AIRPLANE RIDES AVAILABLE

A great opportunity to see homebuilt, classic
and restored military aircraft

FREE ADMISSION TO MASON JEWETT AIRPORT

Hosted by EXPERIMENTAL AIRCRAFT ASSOCIATION - CHAPTER 55

For additional information contact

Ken Vandenberg 517-589-5051 or Joe Madzlar 517-202-3345

or visit www.eaa55.org



DONATIONS BENEFIT THE NEWBERRY AVIATION SCHOLARSHIP FUND

EAA Chapter 55 ... member of the Mason Area Chamber of Commerce



Ted Potempa
and the new
Mettetal Airport
sign he created.
*Photo courtesy
of Pat Trevas*



TECHNICAL COUNSELOR'S NOTES

Randy Hebron (734) 560-2115

rchebron@wowway.com

June 2013

SUPPORT MICHIGAN AIRPORTS AND CUT FUEL TAXES

At this moment, the stakes are high for the future of aviation in Michigan, and we need your help to seize this opportunity.

Governor Snyder and the Michigan Legislature are considering legislation that would improve funding for the state's airports, while decreasing the overall cost of aviation fuel for GA aircraft as part of a comprehensive plan to save Michigan's crumbling infrastructure – as a state priority along with issues like education and healthcare.

This legislation, House Bills 4571 and 4572, would eliminate the \$0.03 per gallon excise tax and 6% sales tax of avgas and replace them with a single 4% wholesale tax – modestly reducing Michigan's nationally uncompetitive, high aviation fuel tax rates. And, this revenue would finally be dedicated to the State Aeronautics Fund, rather than continuing to lose all of it, along with the undedicated revenue from other state aviation taxes, to the State General Fund for non-aviation investments.

For Michigan aviators, this means more affordable flying, and increased vital support for Michigan's aviation infrastructure -- which you count on every time you take flight! Since both bills have been reported favorably by the Committee, we now need to let the House Leadership know these bills are important to the aviation community, as the legislature is now determining whether to make this tough, but needed, policy decision

Please call your state legislator's office today, Representative Robert Kosowski at (517) 373-2576, politely identify yourself as a constituent, and urge your Representative, Robert Kosowski, to contact the Speaker of the House Jase Bolger in SUPPORT of House Bill 4571 and 4572 and to have the Bills scheduled for a vote.

House Bills 4571 and 4572 will:

Increase the competitiveness of Michigan's aviation fuel tax rates

Ensure a secure, long term funding system allowing the Michigan Aeronautics Office to adequately maintain and upgrade critical aviation infrastructure at Michigan's 228 public use airports.

Protect the continued safety and efficiency of Michigan's \$4.1 billion general aviation industry.

Your fellow pilots are counting on you to you contact your Representative quickly and urge them to support House Bill 4571 and 4572 to ensure the continued safety and efficiency of the Michigan aviation system.

June 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 Breakfast at Canton Coney Island
2	3	4	5	6 EAA 113 Builders' Meeting	7	8 Breakfast at Canton Coney Island
9	10	11	12	13 EAA 113 Board of Directors Meeting	14	15 Breakfast at Canton Coney Island
16 EAA 113 Pancake Breakfast Fly-In	17	18	19	20 Northville Downs Charity Poker EAA 113 Meeting	21 Northville Downs Charity Poker	22 Northville Downs Charity Poker Breakfast at Canton Coney
23	24	25	26	27 EAA 113 Flying Safety Meeting	28	29 Breakfast at Canton Coney Island
30						



MARK YOUR CALENDARS!

Chapter 113 Picnic
Thursday, June 20, 2013 - 6:30 pm
Bring a dish to pass!

Chapter will provide hamburgers,
hot dogs, drinks, and condiments.

EAA Chapter 113

Mark Freeland

1480 Oakwood

Sylvan Lake, MI 48320

Next Meeting & Picnic: Thursday, June 20, 2013
6:30 PM at the EAA Aviation Education Center